

OKSMAN, Ya.B.; BABAYEV, A.; BOGUSH, G.; DOLINA, Ye.; KOVYNEV, B.; MIRNYI, G.;
RUBEO, Stelio (Italiya); SING, Ramkhandr (Indiya); SOMOV, Yu.; KHARSH,
D'yerd' (Vengriya); YUR'YEV, N.; YANEV, Kirill (Bolgariya); LAPIDUS,
M.A., red.; BALLOD, A.I., tekhn.red.

[Foreign visitors on Soviet agriculture; impressions of participants
in the Sixth World Festival of Youth and Students] Zarubezhnye
gosti v sel'skom khoziaistve SSSR; vpechatleniia uchastnikov VI
Vsemirnogo festivalia molodezhi i studentov. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1958. 239 p. (MIRA 12:4)
(Agriculture)

KUGAYENKO, M.Ya., inzhener; KOVYNEV, M.V., inzhener; MILLER, V.V., inzhener.

The use of textolite bearings with forced lubrication at the Veroshilov
Metallurgical Plant. Metallurg no.4:32-34 Ap '56. (MLRA 9:9)
(Bearings (Machinery)) (Textolite)

SOV/133-59-6-20/41

AUTHORS: Kugayenko, M.Ye., Meleshko, A.M. and
Kovynev, M.V., Engineers

TITLE: Some Special Features of Rolling Plates with Rolled
Edges in Mills with Vertical Rolls (Osobennosti
prokatki tolstykh listov s katanoy kromkoy v stanakh s
vertikal'nymi valkami)

PERIODICAL: Stal', 1959, Nr 6, pp 532-538 (USSR)

ABSTRACT: During transverse rolling of slabs tapering of the
ends takes place which prevents the production of
rectangular plates with parallel edges along the whole
length. In vertical rolls of the roughing stand it is
practically impossible to remove this tapering
completely; even with rectangular plates, passed through
vertical rolls, tapering of the ends takes place during
subsequent rolling in horizontal rolls due to the
non-uniformity of localised spread (thickening of the
edges) along the length of the plate. The tapering is
directly proportional to the side reduction and
decreases with increasing intensity of subsequent
reductions in horizontal rolls. As the middle part
Card 1/3 (along the length) of plates always has parallel edges

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Some Special Features of Rolling Plates with Rolled Edges in Mills with Vertical Rolls

it is possible to produce all sizes of plates with rolled edges, but the consumption of metal for cutting off tapered ends must unavoidably increase and the economy of metal expected from rolling the edges is decreased or completely lost. The basic condition for the production of wide plates with parallel edges, rolled along the whole length is widening the ends of the strip before rolling in vertical rolls which can compensate for subsequent tapering. Such preliminary widening of the ends for not such wide plates can be obtained by maximum longitudinal rolling of short slabs in the first passes before rolling for width. For wider plates, the effective method of widening ends would be transverse rolling (the use of which can increase lamination defects) or compression of small

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Some Special Features of Rolling Plates with Rolled Edges in Mills
with Vertical Rolls

faces of slabs in vertical rolls which requires
further study. There are 5 figures and 7 references,
6 of which are Soviet and 1 English.

ASSOCIATION: Alchevskiy metallurgicheskiy zavod
(Alchevsk Metallurgical Works)

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KOVYNEV, M. V.

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3/137/62/000/001/079/237
AC69/A101

AUTHORS: Piryazev, D. I., Golubov, M. M., Dabagyan, I. P., Timofeyev, D. I.,
Meloshko, A. M., Kovynev, M. V.

TITLE: The roll separating force of the metal and the loading of the main
motors in the course of rolling on the thick sheet mill 2800

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 4 - 5, abstract 1D21
("Sb. tr. Ukr. n.-i. in-t metallov", 1961, no. 7, 165 - 177)

TEXT: The authors studied the power conditions for rolling at the thick-
sheet mill 2800 of the Plant imeni Voroshilov. The mill is designed for rolling
sheets with thickness 6 - 50 mm, width 2,500 - 2,600 mm. It consists of a stand
with vertical rolls, a roughing two-high stand with working rolls 1,150 mm dia,
a universal finishing four-high stand 800/1400. The stands are arranged in a
sequence. The roll separating force of the metal in the roughing and the finish-
ing stands was measured by means of force meters with wire tensometers. The
force meters were welded to the pedestals of the working stands on the side of
drive. The pulses from the tensometers were recorded by a magnetoelectric os-
cillograph HOE -14 (POB-14). A calculation of the forces from the torque was

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AC60/A101

The roll separating force of...

carried out to verify the values determined by the force meters. The mean pressures were calculated from the total forces obtained experimentally. Simultaneously with the measurement of the forces, the operation of the main drive motors was oscillographed. The oscillograms recorded the current, voltage, and the number of revolutions of the motors. The investigations have demonstrated that: 1) the separating force of the metal on the rolls of the four-high stand is, in all the cases investigated, below the admissible; 2) the closest agreement with the experimental data is given by the values of the mean pressures as calculated by the Golovin-Tyagunov method; 3) the main motors of the mill 2800 are not utilized to full capacity.

G. Grigoryan

[Abstracter's note: Complete translation]

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KOVYNEV, M.V.

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PHASE I BOOK EXPLOITATION

SOV/5985

Rokotyan, Ye. S., Doctor of Technical Sciences, ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 1. Moscow, Metallurgizdat, 1962. 743 p. Errata slip inserted. 9250 copies printed.

Authors of this volume: B. S. Azarenko, Candidate of Technical Sciences; V. D. Afanas'yev, Candidate of Technical Sciences; M. Ya. Brovman, Engineer; M. P. Vavilov, Engineer; A. B. Vernik, Engineer; K. A. Golubkov, Engineer; S. I. Gubkin, Academician, Academy of Sciences BSSR; A. Ye. Gurevich, Engineer; V. I. Davydov, Candidate of Technical Sciences; V. G. Drozd, Engineer; N. P. Yermolayev, Engineer; Ye. A. Zhukovich-Stesha, Engineer; N. M. Kirilin, Candidate of Technical Sciences; M. V. Kovynev, Engineer; A. M. Kogon, Engineer; A. A. Korolev, Professor; M. Ye. Kugayenko, Engineer; A. V. Lankin, Engineer; B. A. Levitanakiy, Engineer; V. M. Lugovskoy, Engineer; I. M. Meyerovich, Candidate of Technical Sciences; M. S. Ovcharov, Engineer; V. I. Pasternak, Engineer; I. L. Perlin, Doctor of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; Ye. S. Rokotyan, Doctor of Technical Sciences; M. M. Saf'yan, Candidate of Technical Sciences; V. V. Smirnov, Candidate of Technical Sciences; V. S. Smirnov, Corresponding Member, Academy of Sciences USSR; O. P. Sokolevskiy,

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Rolling Industry; Handbook

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Engineer; O. P. Solov'yev, Engineer; M. A. Sidorkovich, Engineer; Ye. M. Trat'yakov, Engineer; I. S. Trishovskiy, Candidate of Technical Sciences; G. N. Khunin, Engineer; and A. I. Tsolikov, Corresponding Member, Academy of Sciences USSR. Introduction: A. I. Tsolikov, Corresponding Member, Academy of Sciences USSR; Ye. S. Roketyan, Doctor of Technical Sciences; and L. S. Al'shevskiy, Candidate of Technical Sciences.

Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobushinskaya.

PURPOSE: This handbook is intended for technical personnel of metallurgical and machine-building plants, scientific research institutes, and planning and design organizations. It may also be useful to students at schools of higher education.

COVERAGE: The fundamentals of plastic deformation of metals are discussed along with the theory of rolling and drawing. Methods of determining the power consumption and the forces in rolling with plane surface or grooved rolls are .

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KUGAYENKO, Mikhail Yevdokimovich; KOVYNEV, Mikhail Vasil'yevich;
MILLER, Viktor Viktorovich; GOROBINCHENKO, V.M., red. izd-
va; DOBUZHINSKAYA, L.V., tekhn. red.

[Sheet-rolling mill practice; manual for increasing the
qualifications of workers in the industry] Listoprokatnoe
proizvodstvo; posobie dlia povysheniia kvalifikatsii rabo-
chikh na proizvodstve. Moskva, Metallurgizdat, 1962. 429 p.
(Rolling (Metalwork)) (MIRA 15:10)

KOVYNEV, M.V.

(40)

PHASE I BOOK EXPLOITATION SOV/6044

• Rokotyan, Ye. S., Doctor of Technical Sciences, Ed.

• Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook)
v. 2. Moscow, Metallurgizdat, 1962. 685 p. 8500 copies
printed.

Authors: P. A. Aleksandrov, Doctor of Technical Sciences;
V. P. Anisiforov, Candidate of Technical Sciences; V. I. Bayrakov,
Candidate of Technical Sciences; M. V. Barbarich, Candidate
of Technical Sciences; B. P. Bakhtinov, Candidate of Technical
Sciences [deceased]; B. A. Bryukhanenko, Candidate of Economic
Sciences; M. V. Vasil'chikov, Candidate of Technical Sciences;
A. I. Vitkin, Doctor of Technical Sciences; S. P. Granovskiy,
Candidate of Technical Sciences; P. I. Grudev, Candidate of
Technical Sciences; I. V. Gunin, Engineer; M. Ya. Dzugutov,
Candidate of Technical Sciences; V. G. Drozd, Candidate of
Technical Sciences; N. P. Yermolayev, Engineer; G. M. Katsnel'son,
Candidate of Technical Sciences; M. V. Kovynev, Engineer;
M. Ye. Kugayenko, Engineer; N. V. Litovchenko, Candidate of
Technical Sciences; Yu. M. Matveyev, Candidate of Technical
Card 1/14

Rolling Industry; Handbook

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Sciences; V. I. Meleshko, Candidate of Technical Sciences; N. V. Melchov, Engineer; A. K. Minburg, Candidate of Technical Sciences; V. D. Nosov, Engineer; B. I. Panchenko, Engineer; O. A. Plyatskovskiy, Candidate of Technical Sciences; I. S. Pobodin, Candidate of Technical Sciences; I. A. Priymak, Professor, Doctor of Technical Sciences [deceased]; A. A. Protasov, Engineer; M. M. Saf'yan, Candidate of Technical Sciences; N. M. Fedosov, Professor; S. N. Filipov, Engineer [deceased]; I. N. Filippov, Candidate of Technical Sciences; I. A. Fomichev, Doctor of Technical Sciences; M. Yu. Shifrin, Candidate of Technical Sciences; E. R. Shor, Candidate of Technical Sciences; M. M. Shternov, Candidate of Technical Sciences; M. V. Shuralev, Engineer; I. A. Yukhvets, Candidate of Technical Sciences; Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This handbook is intended for engineering personnel of metallurgical and machine-building plants, scientific research

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Rolling Industry; Handbook

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institutes, and planning and design organizations. It may also be used by students at schools of higher education.

COVERACE: Volume 2 of the handbook reviews problems connected with the preparation of metal for rolling, the quality and quality control of rolled products, and designs of roll passes in merchant mills. The following topics are discussed: processes of manufacturing semifinished and finished rolled products (the rolling of blooms, billets, shapes, beams, rails, strips, wire, plates, sheets, and the drawing of steel wire), hot-dipped tin plates, lacquered plates, floor plates, tubes made by different methods, and special types of rolled products. Problems of the organization of rolling operations are reviewed, and types of rolled products manufactured in the USSR are shown. No personalities are mentioned. There are no references.

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AZARENKO, B.S., kand. tekhn. nauk; AFANAS'YEV, V.D., kand. tekhn. nauk;
 BROVMAN, M.Ya., inzh.; VAVILOV, M.P., inzh.; VERNIK, A.B., inzh.;
 GOLUBKOV, K.A.; GUBKIN, S.I., akademik [deceased]; GUREVICH, A.Ye.,
 inzh.; DAVYDOV, V.I., kand. tekhn. nauk; DROZD, V.G., inzh.;
 YERMOLAYEV, N.F., inzh.; ZHUKOVICH-STOSHA, Ye.A., inzh.; KIRILIN,
 N.M., kand. tekhn. nauk; KOVYNEV, M.V., inzh.; KOGOS, A.M., inzh.;
 KOROLEV, A.A., prof.; KUGAYENKO, M.Ye., inzh.; LASKIN, A.V., inzh.;
 LEVITANSKIY, B.A., inzh.; LUGOVSKIY, V.M., inzh.; MEYEROVICH, I.M.,
 kand. tekhn. nauk; OVCHAROV, M.S., inzh.; PASTERNAK, V.I., inzh.;
 PERLIN, I.L., doktor tekhn. nauk; POBEDIN, I.S., kand. tekhn. nauk;
 ROKOTYAN, Ye.S., doktor tekhn. nauk; SAF'YAN, M.M., kand. tekhn.
 nauk; SMIRNOV, V.V., kand. tekhn. nauk; SMIRNOV, V.S.; SOKOLOVSKIY,
 O.P., inzh.; SOLOV'YEV, O.P., inzh.; SIDORKEVICH, M.A., inzh.;
 TRET'YAKOV, Ye.M., inzh.; TRISHEVSKIY, I.S., kand. tekhn. nauk;
 KHENKIN, G.N., inzh.; TSELIKOV, A.I.; GOROBINCHENKO, V.M., red.
 izd-va; GOLUBCHIK, R.M., red. izd-va; RYMOV, V.A., red. izd-va;
 DOBUZHINSKAYA, L.V., tekhn. red.

[Rolling; a handbook] Prokatnoe proizvodstvo; spravochnik. Pod
 red. E.S. Rokotiana. Moskva, Metallurgizdat. Vol.1. 1962. 743 p.

1. Akademiya nauk BSSR (for Gubkin). 2. Chlen-korrespondent Akademii
 nauk SSSR (for Smirnov, Tselikov).
 (Rolling (Metalwor))—Handbooks, manuals, etc.)

...KOVYNEV, M.V., inzh.; ZELICHENOK, B.Yu., inzh.; GERTSEV, A.I., inzh.;
VOZNESENSKIY, V.A., inzh.

Optimum amount of slab reduction in stands with 2800 vertical roll
mills. Stal' 23 no.6:529-530 Je '63. (MIRA 16:10)

1. Orsko-Khalilovskiy metallurgicheskiy kombinat.

KOVYNEV, M.V., inzh.; ZELICHENOK, B.Yu., inzh.; GERTSEV, A.I., inzh.;
FIDEL', E.L., inzh.; KATRICHENKO, K.P., inzh.

Effect of certain technological factors of rolling on a 2,800
two-high mill on the shape of the piece. Stal' 24 no.11:1009-
1013 N '64. (MIRA 18:1)

BROVMAN, M.Ya.; GERTSEV, A.I.; ZELICHENOK, B.Yu., ~~KOVYNEV, M.V.~~ RIMEN,
V.Kh.; FIDEL', E.L.

Power parameters of rolling in rolls with a special shape of
the surface. Stal' 25 no.3:251-253 Mr '65. (MIRA 18:4)

ZELICHENOK, B.Yu., inzh.; BABITSKIY, M.S., inzh.; VARNAVSKIY, I.N., inzh.;
KOVYNEV, M.V., inzh.; MEDVEDEV, V.V., inzh.; ZASLAVSKIY, A.Ya.,
inzh.

Influence of cross rolling on the quality of 16GN and 17GS steel
sheets. Stal' 25 no.8:825-828 S '65. (MIRA 18:9)

1. Orsko-Khalilovskiy metallurgicheskiy kombinat i Chelyabinskiy
nauchno-issledovatel'skiy institut metallurgii.

L 36136-66 EWT(d)/EWT(m)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) IJP(c)
 ACC NR: AT6016762 JD/HM/HW(N) JT SOURCE CODE: UR/2776/65/000/042/0059/0063

AUTHOR: Golovanenko, S. A.; Ustimenko, V. A.; Kovynev, M. V.; Zalichenok, B. Yu.;
Mul'ko, G. N.

ORG: none

TITLE: Rolling of steel-monel bimetal plate in a "2800" mill

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.
Sbornik trudov, no. 42, 1965. Proizvodstvo bimetallov (Production of bimetals), 59-63

METAL ROLLING, CARBON STEEL,
 TOPIC TAGS: killed carbon steel, monel alloy, plate mill, bimetal, metal cladding,
chemical plant equipment / VSt. 3sp. carbon steel, NMZhMts-28-2.5-1.5 monel
alloy, "2800" plate mill

ABSTRACT: To verify the possibility of the mass production of bimetal plate (sheet
 of steel clad with sheet of monel) as well as to construct from this plate experi-
 mental models of petroleum-refinery apparatus, a pilot-industrial batch (4 tons) of
 such plate was rolled in a "2800" plate mill of the Orsk-Khalilovka Metallurgical
Combine, for the first time in the USSR. The base layer used was VSt. 3sp. killed
carbon steel (0.17% C, 0.37% Mn, 0.22% Si, 0.05% Cr, 0.27% Ni, 0.08% Cu, 0.026% S,
0.012% P), and the cladding layer was NMZhMts-28-2.5-1.5 monel alloy with a chemical
composition meeting the All-Union State Standard GOST 492-52. The sheets were welded

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together into laminated strips measuring 191x1000x1810 mm and, prior to their rolling, heated in a continuous furnace for 3 hr. After this, they were rolled under conditions similar to those of the rolling of ordinary steels, in breakdown and finishing stands with rolls of 1100-mm diameter, with final rolling to a thickness of 20 mm in a four-high finishing stand with rolls of 800/1300 mm diameter. During the rolling the current intensity in the armatures of the motors of the two-high breakdown stand was oscillographically recorded and the findings were used to calculate the torque and the pressure exerted by the metal on the rolls during the individual operations. These calculations showed that the maximum rolling stress during the rolling of steel-monel bimetal is 1930 tons, which is substantially below the maximum permissible stress for the rolls (2300 tons). Tests established that the properties of such plate definitely meet the requirements posed to this material by the petrochemical machine building industry and the cost of such plate is, even under conditions of experiment, 30-40% lower than that of solid monel plate and, moreover this reduces the consumption of monel to one-half or one-third as compared with solid monel plate. Thus, it is feasible and expedient to organize the rolling of steel-monel bimetal plate in ferrous metallurgy plants. Orig. art. has: 1 figure, 2 tables, 3 formulas.

SUB CODE: 13, 11 / SUBM DATE: none

Joining of Dissimilar Metals 18

Card 2/2 *ell*

ROVNEV, N.

O rabote s knizoi [Working with books]. Moskva, "Molodnia gardia", 1953. 45 p.
(B-chita konsul'skogo propagandista).

CO: Monthly List of Russian Accessions, Vol 7, No 4, July 1954.

UMNYAKOV, I.I.; ALESKEROV, Yu.N.; KOVYNEV, N., red.; BAKHTIYAROV, A.,
tekhn.red.

[Samarkand; concise reference book] Samarkand; kratkii spravochnik. Izd.2., dop. 1 ispr. Tashkent, Gos.izd-vo Uzbekskoi SSR, 1958. 158 p. (MIRA 14:2)
(Samarkand--Guide books)

GABRIYEL'YANTS, G.A., glav. red.; AZIZKHANOV, D.A., red.; VENGERSKIY, V.M., red.; YEREMENKO, V.Ye., red.; YERSHOVA, Ye.M., red.; ZININ, T.G., red.; KOVYNEV, N.P., red.; RAKHMANKULOV, M.M., red.; SLIVKIN, I.Z., red.; TIKHOMIROV, A.I., red.; YUNUSOV, F.Yu., Qeroy Sotsialisticheskogo Truda, red.; AKBAROV, A., red.; BAKHTIYAROV, A., tekhn. red.

[Materials of the Conference of Agricultural Workers of Central Asia, Azerbaijan, and Southern Areas of Kazakhstan] Materialy Soveshchaniya rabotnikov sel'skogo khozyaystva respublik Sredney Azii, Azerbaydzhana i yuzhnykh oblastei Kazakhstana, Tashkent, 1961. Gos. izd-vo Uzbekskoi SSR, 1962. 358 p. (Za rabotu, tovarishchi khlopkoroby!) (MIRA 15:3)

1. Soveshchaniye rabotnikov sel'skogo khozyaystva respublik Sredney Azii, Azerbaydzhana i yuzhnykh oblastey Kazakhstana, Tashkent, 1961. 2. Predsedatel' kolkhoza imeni Karla Marksa Oshskogo rayona Kirgizskoy SSR (for Yunusov).

(Soviet Central Asia—Agricultural workers)

(Azerbaijan—Agricultural workers)

(Kazakhstan—Agricultural workers)

COMMON ELEMENTS																										COMMON RARE-EARTH METALS																									
OPEN																										WATER-ALL INDEX																									
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PROCESSED AND PREPARED BY:

The action of adrenaline and of pituitrin on the chronaxy of the motor centers of the cerebral cortex. I. G. Kopyev and A. A. Markosyan. Bull. bul. med. expl. U. R. S. S. 4, 32-4(1937); Chem. Zentr. 1939, I, 4804.—Intra-venous injection of adrenaline or pituitrin produced a definite reduction in the excitability of the cerebral cortex. M. G. Moore.

(K)

Comparative physiology of digestion. VI. Technique for the study of the gastric glands of the turtle and the effect of mechanical stimuli on their secretion. M. D. Agapova, I. G. Kovyrev, N. V. Imolev and N. V. Chubenko. *J. Physiol.* (U. S. S. R.) 25, 77-81 (in English, 82) (1938). — The application of mechanical stimulation to the gastric mucosa of turtles results after 1.5-4.0 hrs. in secretion which lasts for 3-5 days. Application of mechanical stimuli during the secretion results in inhibition for 2-5 hrs. Chem. stimuli (2% peptone, beef extract) did not produce any secretory response, but caused inhibition of the capacity of the glands to function in response to mechanical stimulation for 5-6 days. S. A. Karjala

II I

ASD SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESS AND PROPERTIES INDEX																																																			
ca													<p>Comparative physiology of digestion. VII. The neuro-humoral mechanism of the secretion of gastric juice in the turtle. I. G. Kovyrev. <i>J. Physiol. (U. S. S. R.)</i> 25, 458 (1938); cf. <i>C. A.</i> 33, 25041; 34, 00801. Tests on 38 turtles with gastric fistula showed subcutaneous and intraperitoneal injection of histamine and meat ext. to produce an increase in the gastric secretion only during the summer months. Chem. stimulation of the severed vagus nerve and injections of adrenaline produced an antagonistic excitation of the gastric glands. VIII. The effect of stimulation and of shunting off of various sections of the central nervous system on the gastric secretion of the frog. N. V. Timofeev, A. P. Leibman and D. S. Panyukhina. <i>Ibid.</i> 673-8. - The gastric secretion produced in frogs with gastric fistula by treatment with 2% peptone or meat ext. was intensified by stimulation of the cerebral hemispheres. The opposite effect was produced by removal of these hemispheres and by stimulation of the optic thalamus and the spinal cord. Through <i>Chem. Zentr.</i> 1939, II, 2101. M. G. Morse</p>																																						
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11 H

Concerning the parasympathetic action of platyphylline.
1. G. Kovtsov, *Byull. Eksp. Biol. Med.* 11, No. 1, 92-4 (1941); *Chem. Zentr.* 1943, 11, 925. Platyphylline is a parasympathetic substance like atropine. It interrupts the response to excitation in the parasympathetic nerve endings, decreases the muscarinic effects of acetylcholine and brings out its nicotinic effect. Other than these platyphylline acts similar to atropine on the vascular centers of the medulla oblongata. The activity of atropine is 20-30 times that of platyphylline. H. P.

1ST AND 2ND CODES		3RD AND 4TH CODES	
PROCESSING AND PROPERTIES INDEX			
<p>CA</p> <p>Effect of eserine and prostigmine on a nerve absolute refractory phase. R. B. Babitski and L. G. Kovyrin. <i>Izv. Akad. Nauk SSSR Ser. Biol. Med.</i> 17, No. 6, 303 (1944). Acetylcholine formed in nerve centers and fibers is a resulting component of the nerve impulse and is a factor for the excitability of the nerve tissue. The effect of eserine and prostigmine, i.e., substances paralyzing cholinesterase, was investigated in order to elucidate the role of acetylcholine in the development of abs. refractoriness. The expts. were carried out with sciatic nerve-gastrocnemius muscle of <i>Rana temporaria</i>. Eserine was used in concns. of 1:10, 1:100, 1:5000, and 1:2000; prostigmine in concentrations of 1:5000, 1:3000, 1:1000, and 1:500. Under the action of eserine, the duration of the abs. refractory phase increased; eserine (1:2000) caused prolongation of the abs. refractoriness 2-3 times; on prolonged washing of the eserinated nerve section with Ringer soln., the duration of abs. refractoriness returned to a value approaching the initial. In a concn. of 1:5000, the change of the abs. refractory phase of the nerve was slighter, and in a concn. of 1:10,000, no change was observed. The effect of prostigmine is less strong; in a concn. of 1:500, it increased the abs. refractoriness of the nerve 1.5-3 times. Eserine and prostigmine inactivate cholinesterase and thus inhibit the hydrolysis of acetylcholine formed in the nerve on stimulation. Acetylcholine accumulates in the nerve and causes prolongation of the abs. refractoriness. In large concns., acetylcholine decreases excitability of the nerve tissue.</p> <p>Sonya G. Machelson</p> <p>11F</p>			
ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION			
1ST AND 2ND CODES		3RD AND 4TH CODES	
1ST AND 2ND CODES		3RD AND 4TH CODES	

PROCEDURES AND PROPERTIES INDEX																									
<p>Quantitative variation of nucleic acids in dog salivary glands in secretion. M. A. Guberniev and L. G. Knyazev. <i>Doklady Akad. Nauk S.S.S.R.</i> 65, 49-52 (1959).—Dog salivary glands under secretion conditions (induced by 1% pilocarpine) were examined. The glands were removed under anesthesia and frozen in liquid air, after which the Schmidt-Lannhauser method (C.I. 40, 21819) was used for analysis (C.I. 42, 7855). Parotid glands show an av. increase of 27.8% in the desoxyribonucleic acid concn. and 40.8% in the ribonucleic acid. The submandibular glands in the process of secretion (induced by electric stimulation of chordae tympani) show a similar increase of nucleic acids, 48.3 and 31.4%, resp. The results may be explained on the basis of participation of nucleic acids in protein synthesis. G. M. Kosolmol</p>																									
<p>ASH-LLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									

//F

Quantitative changes of nucleic acids in the pancreas and liver of dogs in the course of secretion. M. A. Guberniev and I. G. Kovyrev. *Doklady Akad. Nauk S.S.S.R.* 68, 880 (1949) (Engl. transl., 43, 5175). Secretin-stimulated flow of pancreatic juice in anesthetized dog (morphine- $\text{Et}_2\text{O}-\text{CHCl}_3$) results in an increase of nucleic acid content of the secreting tissues: desoxyribonucleates rise by 18-74%, while ribonucleates show an 8-30% rise after a 3-4 hr. expt. The liver secretion is influenced by injection of bile (either cattle or own animal bile) repeated every 20 min. over 3 hrs. with 0-10 ml. injections; in this case the desoxyribonucleates rise from 15.4% to 133.3% (latter figure for complete 3-hr. expt.) in the liver tissue. G. M. Kosolapoff

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CA

The role of adenosinetriphosphoric acid in secretory action of salivary glands. M. A. Guberniev, I. G. Korynev, and M. D. Rodziller. *Doklady Akad. Nauk S.S.S.R.* 76, 101-2 (1951).—Adenosinetriphosphate (ATP) participates in synthesis of the protein secretion at the expense of its energy-rich phosphate links, since ATP concn. drops to 42% of normal when 1.5 ml. 1% pilocarpine is introduced into femoral vein of narcotized dog for stimulation of salivary secretion. G. M. Kosolapoff

KOVYROV, I. G.

USSR/Biochemistry

Card :/1

Authors : Guberniev, M. A., Kovyrov, I. G. and Ushakova, M. D.

Title : About the change of the content of nucleinic acids in salivary glands under un-conditioned or conditional reflexes (irritations)

Periodical : Dokl. AN SSSR 95, 6, 1251 - 1254, 21 April 1954

Abstract : Author describes a series of experiments performed on dogs in order to find out how the content of nucleinic acids in salivary glands change under non-conditioned and conditioned reflexes. Two tables show results of the experiments.

Institution : Institute of Biol. and Medic. Chem. of the Acad. of Medical Scs. of the USSR and V. I. Lenin Pedag. Inst.

Submitted : 22 Feb 1954

GUBERNIYEV, M.A.; KOVYREV, I.G.

Regenerative processes in the digestive glands during secretion.
Uch.zap. MGPI 84:95-109 '55. (MLRA 9:11)

1. Vsesoyuznyy institut antibiotikov Ministerstva zdravookhraneniya
SSSR. Kafedra fiziologii Moskovskogo gosudarstvennogo pedagogiche-
skogo instituta imeni V.I.Lenina, zav. kafedroy prof. V.M.Kas'yanov.
(DIGESTION) (SECRETION) (GLANDS)

KOVYRKOV, A.P.

Piezoelectric ignition system. Avt.prom. 27 no.12:42-43 D '61.
(MIRA 15:1)
(Motor vehicles--Ignition)

KOVYRNOV, M., kamenshchik

Molds for making sewer gutters. Na stroi. Mosk. 2 no.12:27 D '59
(MIRA 13:3)

1. SU-91 tresta Mosstroy No.20.
(Sewers, Concrete)

Kovyrshin, V.G.

136-8-13/21

AUTHORS: Kovyrshin, V.G. and Apollonov, V.K.

TITLE: More Complete Extraction of Molybdenum and Rhenium from Calcium Molybdate-Production Mother Liquors (Doizvlecheniye molibdena i reniya iz matochnykh rastvorov proizvodstva molibdata kal'tsiya)

PERIODICAL: Tsvetnye Metally, 1957, Nr 8, pp.67-73 (USSR)

ABSTRACT: An account is given of research work carried out at the Balkhash Copper-Smelting Works with the aim of reducing losses of molybdenum and rhenium in calcium-molybdate mother liquor. These losses were normally about 1.3% Mo and 25% Re and it was planned to extract the metals more fully by the cementing method. The theory of this method is discussed and laboratory experiments in which rates with various stirring rates, with and without Na_2SO_4 and NaCl , with different acidities and at various temperatures were determined, and the results are tabulated (Tables 1-5), some also being shown graphically (Figs. 2 and 3). Large-scale experiments are also described, flow sheets and plant performance data being given and discussed. Finally, the production of potassium perrhenate and calcium molybdate

Card 1/2

136-8-13/21

More Complete Extraction of Molybdenum and Rhenium from Calcium
Molybdate-Production Mother Liquors.

from the cement precipitate is considered. It is concluded that cementing of molybdenum and rhenium with iron can give a precipitate containing 98% and 90% of the initial molybdenum and rhenium, respectively, in 30-60 min if the operation is carried out at 80-85°C. The process is somewhat slower when sodium sulphate or chloride are present, and also when molybdenum is present (for rhenium). The consumptions of iron and sulphuric acid are high but not excessively so in view of the high prices of the extracted elements. The plant required is relatively simple. There are 6 figures, 6 tables and 3 references, all of them Slavic.

ASSOCIATION: Balkhash Copper-Smelting Works (Balkhaskskiy
medeplavil'nyy zavod)

AVAILABLE: Library of Congress.

Card 2/2

L 62201-65 INT(a)/INT(t)/INT(h) INT(c) ID
ACCESSION NR: AP6015978 UR/0080/65/036/006/1230/1235
541.183.2 + 546.683.1
AUTHOR: Kovyshin, V. G. ; Ponomarev, V. D. ; Kos'min, Yu. A.
TITLE: Adsorption of univalent thallium by oxidized charcoals
SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 6, 1965, 1230-1235

12
B

TOPIC TAGS: charcoal, thallium adsorption, activated charcoal, selective adsorption

ABSTRACT: To verify the hypothesis that oxidized activated charcoals should have selective properties relative to the thallous ion, experiments were carried out in which the conditions of thallium adsorption were investigated. Charcoal brands HAU, SK-1, and ashless activated charcoal obtained from a resorcinol-formaldehyde resin were oxidized with 16-65% nitric acid. Carboxyl and phenol groups were present in the oxidized charcoals, and their content was determined. As the pH rises, the degree of dissociation of the hydrogen ions of these groups increases, causing a marked increase in the adsorptive capacity of the charcoals. The latter were found to adsorb thallous ions selectively from alkaline solutions, the optimum pH being 12. This selectivity is due to the presence of phenol groups. Thallium was eluted off the oxidized charcoals with 4% sulfuric acid; the recovery

of thallium takes place readily and these results are checked on in-

Card 1/2

L 62201-65

ACCESSION NR: AP5015878

in both alkaline and acid media. The results of laboratory studies were checked on in-
dustrial solutions from a lead plant, and it was found that oxidized charcoals can indeed

REF ID: A61218

ASSOCIATION: None

SUBMITTED: 04Apr64

ENCL 00

SUB CODE: MM, MT

NO REF SOV: 005

OTHER: 004

Card 2/2

AUTHOR: Kovyrshin, V.G.

SOV/136-58-10-9/27

TITLE: Production of Ammonium Perrhenate and Other Salts of Rhenic Acid from Potassium Perrhenate (Polucheniye perrenata ammoniya i drugikh soley reniyevoy kisloty iz perrenata kaliya)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 10, pp 43 - 49 (USSR)

ABSTRACT: It has been stated, e.g. by Kislyakov (Ref 2), that ammonium perrhenate is a better source of rhenium than the potassium salt but the preparation of ammonium from the potassium perrhenate was complicated. In 1957, an investigation was carried out at the Balkhash Works with the participation of O.S. Tarasova, as a result of which ammonium perrhenate and other rhenic-acid salts can be obtained from potassium perrhenate with the use of ion-exchange resins. The experiments were made to find the capacity of the resins under flow conditions and at saturation, the filtration rate, the influence of the pH on potassium-ion absorption, the change in the volume of the cation-exchange resin in operation. Type KU-1 resin pre-treated with hydrochloric acid was washed and air dried. An 18 mm diameter, 170 mm high column, containing 20 cm³ (10.70 g of

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SOV/136-58-10-9/27

Production of Ammonium Perrhenate and Other Salts of Rhenic Acid
from Potassium Perrhenate

air-dried) of the resin was used. Potassium perrhenate was recrystallised and contained 64.36% rhenium. Results on the absorption of potassium ions from the solution and the formation of rhenic acid in relation to the rate of filtration (Table 1, Figure 1) show that the capacity of the resin with respect to HReO_4 is 32.87% for flow-past and 40.53% for saturation. Comparative tests with two columns, one containing the resin in the hydrogen (RH) form and the resin in the other being in the ammonium (RH_4) form showed (Tables 2,3) that the former is preferable. Tests with acidulated (pH = 5 and 3) rhenic acid showed that the resin capacity is less with acid potassium perrhenate (Table 4). It was also found (Table 5) that with increasing temperature, the capacity rises. Type EDE-LOP anion exchange resin was used for absorbing PeO_4^{1-} ions with a view to concentrating the rhenic acid in the solution. For this, the potassium perrhenate solution, acidulated to pH = 2 and 5 and containing 0.04 g-equivalents of KReO_4 was passed through a

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SOV/136-58-10-9/27

Production of Ammonium Perrhenate and Other Salts of Rhenic Acid
from Potassium Perrhenate

column of 4.18 g or 15 cm³ of resin (Table 7, Figure 3).
The saturation capacity was 111.1% at pH = 2. By
neutralising rhenic acid with ammonia, sodium hydroxide or
potassium carbonate, the corresponding perrhenates were
obtained (Table 8).

There are 3 figures, 8 tables and 3 Soviet references.

ASSOCIATION: Balkhashskiy medeplavil'nyy zavod (Balkhashskiy
Copper-smelting Works)

Card 3/3

KOYRSHIN, V.G.; PONOMAREV, V.D.; NEVEROVA, G.A.

Sorption of thallium from a solution by means of activated coals
and sulfocarbons. Zhur.prikl.khim. 35 no.12:2629-2640 D '62.

(MIRA 16:5)

(Thallium) (Carbon, Activated) (Sulfocarbons)

KULICHENKO, V.F.; KOVYRSHINA, I.B.; VOYEKOVA, I.S.; SHIRINA, K.F.; BUGEL'SKIY, Yu.A.

[Skillful hands: organisation and work of the "Skillful Hands" club] Umelye ruki. Organizatsiia i soderzhanie raboty kruzhka "Umelye ruki." Izd-vo TsK VLSM "Molodaa gvardiia", 1953. 286 p. (MLRA 6:11)
(Manual training)

SEDCHENKO, A.M.; KOVYRSHINA, N.I.; RAABE, K.Kh.; DASHKOVA, A.I.

Improving the quality of flotation concentrates in the dressing
of Kazakhstan complex metal ores. TSvet. met. 36 no.8:10-12

Ag '63.

(MIRA 16:9)

(Kazakhstan--Nonferrous metals)

(Flotation--Quality control)

KOVYRSHINA, N.I.; RISKIN, M.A.; STROITELEV, I.A.

Flotation recovery of copper from converter slags at the
Mednogorsk plant. Tsvet. met. 38 no.6:42-43 Je '65.
(MIRA 18:10)

DURKOVSKIY, G. I.; ~~POVARNY'ICV, I. F.~~

Engr., Chusovsk Metallurgical Factory, cl948-.

"Notes to familiarize technicians with wheel shapes.,"
Stal., No. 7, 1948

SO: Monthly List of Russian Accessions, Library of Congress, _____ 1953, Uncl.

KOVRYALOV, I.P., Inzh.

Some problems in the management of the Severskiy Pipe Mill.
Stal' 25 no.8:754-755 Ag '65. (MIRA 18:8)

1. Severskiy trubnyy zavod.

S/133/60/000/004/001/010
A054/A026

AUTHORS: Kovyryalov, I.P., Engineer; Popel', S.I., Candidate of Techni-
cal Sciences; Konovalov, G.F., Engineer; Polzunov, A.M., En-
gineer

TITLE: The Effect of Deoxidation of Steel¹⁸ and its Treatment by Sodium
Silicate on the Percentage of Non-Metallic Inclusions ✓

PERIODICAL: Stal', 1960, No. 4, pp. 305 - 307

TEXT: At the Severskiy metallurgicheskiy zavod (Seversk Metallurgical
Plant) the effect of deoxidation by ferromanganese and ferrosilicon, as well
as the effect of a treatment with sodium silicate and a sand-scale mixture
on the steel in the furnace were investigated. The steel tested had the
following composition: C: 0.13 - 0.16%; Mn: 0.30 - 0.40%; Si: \leq 0.03%;
P: \leq 0.050%; S: \leq 0.055%. Melting was carried out according to the scrap
process, in a basic, black oil fired Siemens-Martin open-hearth furnace. ✓
To deoxidation ferromanganese and an addition of blast-furnace ferrosilicon
were applied, while for the slagging of floating inclusions on the surface of
the molten metal a sand-scale mixture (65%: 35%) was dispersed. The per-
centage of inclusions in the metal varied between 0.03 - 0.07% and of this

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S/133/60/000/004/001/010
A054/A026

The Effect of Deoxidation of Steel and its Treatment by Sodium Silicate on the Percentage of Non-Metallic Inclusions

percentage the high-melting components (corundum, spinel) were 70 - 90%, deteriorating the quality of steel. The analysis of the test showed that upon adding ferrosilicon the percentage of high-melting inclusions decreased by about 20 - 30%, whereas that of the silicate inclusions increased by about 30 - 50%, while the grain size of the glasslike inclusions also increased (up to 0.3 - 0.5 mm² and more). Thus, under the influence of deoxidation with ferromanganese and ferrosilicon the high-melting components could be slagged more efficiently. Tochinskiy and Perren (Ref. 6) applied low-melting silicates to the removal of inclusions and impurities from the steel. In the process described in the present paper low-melting sodium silicate powder (24.1% Na₂O and 62.8% SiO₂) was applied as fluxing agent which easily forms drops on account of its low surface tension at the gas zone (300 erg/cm²). Sodium silicate was a) either sprinkled on the metal surface in the ingot mold or b) it was added partly to the metal when tapped from the furnace, partly to the ladle when one third full and finally it was also put into the ingot mold. In both test

✓

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S/133/60/000/004/001/010
A054/A026

The Effect of Deoxidation of Steel and its Treatment by Sodium Silicate on the Percentage of Non-Metallic Inclusions

series the metal was reduced in the furnace by ferromanganese only. 300 g of a mixture of 65% of sand and 35% of scale was added to one part of the ingot molds, whereas an equal amount of sodium silicate to the other ingot molds. In the slag samples taken from the castings treated without fluxing agents, 30 - 40% spinel, 15% ferric oxide, 10% silicate glass and up to 40% manganese orthosilicate were found. Table 1 shows that when adding sodium silicate to the ladle and to the ingot mold the total amount of inclusions is not affected, but their chemical composition is changed. SiO_2 increased from 10 - 15% up to 48%, whereas the content of the high-melting components (manganese oxide and in many cases ferro-oxide content) decreased, sometimes magnesium and chrome oxide were even completely lacking. The amount of waste products was also reduced by this process. When milling strips from 139 tons of casting treated by sodium silicate, the waste products amounted to 1,329 kg, whereas the corresponding figure from an equal amount of castings treated by sand-scale mixture was 2,125 kg. The plastic properties of the steel also improved (relative elongation increased from 31.8 to 33.2%)

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S/133/60/000/004/001/010
A054/A026

The Effect of Deoxidation of Steel and its Treatment by Sodium Silicate on the Percentage of Non-Metallic Inclusions

and better results were obtained in the Ericsson test of sheets. The improvements can be put down to the fact that by the influence of the sodium silicate treatment the phase of the non-metallic inclusions was changed, the concentration of the high-melting inclusions decreased and their place was taken by plastic silicates (Ref. 2). The engineers V.N. Khorev, E.R. Rimm, N.I. Zelenyy, E.L. Mitropolitanskaya, R.B. Gel'man and V.L. Ogorodnikov took part in the work. Professor O.A. Yesin helped in the work. ✓

ASSOCIATION: Severskiy metallurgicheskiy zavod (Seversk Metallurgical Plant)
and Ural'skiy politekhnicheskiy institut (Ural Polytechnical
Institute)

Card 4/4

KOVYRYALOV, I.P., inzh.; TANTSYREV, O.V., inzh.

Research at the Severskiy Metallurgical Plant. Stal' 23
no.2:132,169-170 F '63. (MIRA 16:2)
(Severskiy--Metallurgical research)

KOVYRYALOV, Yu.P.; SOGURENKO, V.P.

Mustard, a high-profit crop. *Zemledelie* 7 no.4:62-64 Ap '59.
(MIRA 12:6)

1. Sekretar' Leninskogo rayonnogo komiteta Kommunisticheskoy partii
Sovetskogo Soyuz Stalingradskoy oblasti (for Kovyryalov). 2. Glavnyy
agronom rayonnoy inspeksii po sel'skomu khozyaystvu, Leninskiy
rayon (for Sogurenko).
(Mustard)

GAVRILOV, Aleksey Maksimovich; KOVIRYALOV, Yuriy Platonovich; KUKLIN, P.V.,
red.; IZHBOLDINA, S.I., tekhn. red.

[Reclaiming floodlands in Stalingrad Province] Osvoenie poimennykh
zemel' Stalingradskoi oblasti. Stalingrad, Stalingradskoe knizhnoe
izd-vo, 1961. 138 p. (MIRA 14:11)

1. Kafedra zemledeliya Stalingradskogo sel'skokhozyaystvennogo in-
stituta (for Gavrilov). 2. Sekretar' rayonnogo komiteta Kommunisti-
cheskoy partii Sovetskogo Soyuza (for Koviryalov).

(Volgograd Province--Drainage)

(Volgograd Province--Agriculture)

KOVYRYALOV, Yu.P.

Ways of increasing the production of corn in the northern part of
the Volga-Akhtuba Lowland. Zemledelie 23 no.1:7-12 Ja '61.

(MIRA 13:12)

1. Pervyy sekretar' Sredneakhtubinskogo Rayonnogo komiteta
Kommunisticheskoy partii Sovetskogo Soyuza, Stalingradskoy oblasti.
(Volga Valley--Corn (Maize))
(Akhtuba Valley--Corn (Maize))

KOVYRYALOV, Yu.P.; PANSIN, I.A., dotsant; MOROZOVA, A.M., agronom;
BARYSHEV, M.V., agronom; DMITRIYEV, N.I., agronom

One of the problems in the reclamation of the Volga-Akhtuba
floodland. Zashch. rast. ot vred. i bol. 6 no.5:7-8 My '61.

(MIRA 15:6)

1. Sekretar' Sredne-Akhtubinskogo rayonnogo komiteta Kommunisti-
cheskoy partii Sovetskogo Soyuza (for Kovyryalov). 2.
Zaveduyushchiy kafedroy zoologii i entomologii Stalingradskogo
sel'skokhozyaystvennogo instituta (for Panshin).
(Volga-Akhtuba flood plain--Fruit--Diseases and pests)

KOVYRYALOV, Yu. P., kand. sel'skokhozyaystvennykh nauk

Ways for further increase of grain production in the lower
Volga Valley. Zemledelie 24 no.12:7-13 D '62.
(MIRA 16:1)

1. Volgogradskoye territorial'noye proizvodstvennoye
sovkhozno-kolkhoznoye upravleniye.

(Volga Valley—Grain)

KOVYRYALOVA, T. F.

Causes of the turbidity of the lacquer No.1426 stored at low temperatures and means for eliminating it. Lakokras.mat.1 ikh prim. no.5:81 '60.

(MIRA 13:11)

(Lacquer and lacquering)

S/081/61/000/021/086/094
B145/B144

AUTHOR: Kovyryalova, T. F.

TITLE: Glyptal resin no. 188 on the basis of cottonseed oil

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 457 - 458,
abstract 21P122. (Lakokrasochn. materialy i ikh primeneniye,
no. 1, 1961, 73)

TEXT: This is a report on the replacement of linseed oil (L) and sunflower oil (S) in resin no. 188 by cottonseed oil (C), which is available in larger quantities, cheaper, and contributes to longer conservation of plasticity and durability of nitroglyptal coatings on the basis of oil-alkyd resins. Samples of resin no. 188 containing C, prepared under industrial conditions, met all technological requirements. The characteristic features of samples of resin no. 188 containing L, S, and C, or as well as the test results of coatings obtained on this basis, which demonstrate the suitability of replacing L and S by C, are given. ✓
[Abstracter's note: Complete translation.]

Card 1/1

KOVYRZIN, V.K.

137-58-4-6980

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 95 (USSR)

AUTHORS: Mitrenin, B. P., Burdiashvili, Sh. S., Shamba, N. A., Volkov, V. P., Kovyrzin, V. K., Solov'yev, L. K.

TITLE: Obtaining Single Crystals of Silicon by Extraction From a Melt (Polucheniye monokristallov kremniya metodom vytyagivaniya iz rasplava)

PERIODICAL: V sb.: Vopr. metallurgii i fiz. poluprovodnikov. AN SSSR. 1957, pp 24-34

ABSTRACT: The possibility of obtaining large single crystals with a specified orientation from material purified by acid washing or obtained by reduction of SiCl_4 by zinc, and the distribution of certain impurities in the extracted bar was investigated by the use of tagged atoms. The apparatus built employed high frequency heating of a base in which there was emplaced a quartz crucible containing the Si, or by means of a graphite resistance heater in the center of which, and on a quartz base, there was placed a graphite holder with the quartz crucible having the Si. A vacuum of 10^{-4} mm Hg was maintained in the apparatus. The crucible was free to rotate at a speed of 1 rpm, and the seed in a direc-

Card 1/3

137-58-4-6980

Obtaining Single Crystals of Silicon by Extraction From a Melt

tion opposite to that of the rotation of the crucible at a rate of 2 rpm. The rate of extraction was 0.5-1 mm/min. It was established that when a slag film existed at the surface of the melt it was not possible to obtain any single crystals, as a number of small crystals appeared at points of accumulation of slag and at the point of inoculation. Repeated extractions after careful etching, and upon removal of visible slag inclusions on the surface of the bar by emery and cutting away of its ends, made it possible to obtain single crystals of 15-20 mm diameter and lengths up to 240 mm. Before pulling the crystal, the melt was held for 15-20 min at the pulling temperature in order for equilibrium to be established. The opinion is offered that the polycrystallinity of a drawn bar is also due to the formation of a film of SiO_2 when the vacuum is reduced below 10^{-4} mm Hg, additional centers of crystallization being set up thereby. One of the possible causes of further increase in vacuum is the reaction of quartz and graphite, and therefore the crucibles in the apparatus employed were placed so that they would touch the bases only at three points. It was observed that vibration of the apparatus facilitated twinning in the single crystal being grown. Radioactive isotopes made it possible to determine that Sb and Ag (respectively 1.5 and 6.1 mg per 40 g Si) were completely distilled from the melt and were not to be found in the crystal. Ta (12.5 mg per 40 g Si) remained in its entirety in the zone, and was the last to solidify, while Fe

Card 2/3

137-58-4-6980

Obtaining Single Crystals of Silicon by Extraction From a Melt

(46.6 mg per 40 g Si) undergoes virtually uniform distribution through the bar in the process of extraction, the bulk of it remaining in the melt.

1. Single crystals--Production
2. Silicon tetrachloride--Reduction
3. Zinc--Applications

I. S.

Card 3/3

21c
L 18316-65 EWO(j)/EWT(1)/EWP(e)/EWG(k)/EWT(m)/EPP(c)/EPP(n)-2/EPR/EEC(b)-2/EWP(b)
Pg-6/Pr-4/Ps-4/Pu-4 IJP(c)/AFWL/SSD WW/AT/WH
ACCESSION NR: AP4049532 S/0089/64/017/005/0329/0335

AUTHOR: Millionshchikov, M. D.; Gverdtseitell, I. G.; Abramov, A. S.; Gorlov, L. V.; Gubanov, Yu. D.; Yefremov, A. A.; Zhukov, V. F.; Ivanov, V. Ye.; Kovy*rzin, V. K.; Koptelov, Ye. A.; Kosovskiy, V. G.; Kukharkin, N. Ye.; Kucherov, R. Ya.; Laly*kin, S. P.; Merkin, V. I.; Nechayev, Yu. A.; Pozdnyakov, B. S.; Ponomarev-Stepnov, N. N.; Samarin, Ye. N.; Serov, V. Ya.; Usov, V. A.; Fedin, V. G.; Yakovlev, V. V.; Yakutovich, M. V.; Khodakov, V. A.; Kompaniyets, G. V.

TITLE: The "Romashka" high-temperature reactor-converter /9

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 329-335

TOPIC TAGS: nuclear power reactor, reactor feasibility study, re-
search reactor, thermoelectric converter/Romashka

ABSTRACT: The authors briefly describe the construction, parameters, test results, and operating experience of the "Romashka" reactor-

Cord 1/48

18316-65
ACCESSION NR: AP4049532

converter unit, which has been in operation at the Kurchatov Atomic Energy Institute since August 1964. The fuel used is uranium dioxide enriched to 90% U^{235} . Graphite and beryllium are used as reflectors. Electricity is generated by silicon-germanium semiconductor thermocouples distributed on the outer surface of the reflector and connected in four groups which can be connected in series or in parallel. The temperatures of the active zone and outer surface are 1770 and 1000C, respectively. The power ratings are 0.50-0.80 kW electric and 40 kW thermal, the maximum current (parallel connection) is 88 A, the neutron flux is 10^{13} neut/cm² sec in the center of the active zone and 7×10^{12} on its boundary. The reactor has a negative temperature reactivity coefficient. The equipment has high inherent stability and requires no external regulator, and little change was observed in the thermocouple properties after 2500 hours of operation. Tests on the equipment parameters are continuing, and the results are being analyzed for use in future designs. Orig. art. has: 8 figures and 1 formula.

Cord 2/3

MILLIONSHCHIKOV, M.D.; GVERDTSITELI, I.G.; ABRAMOV, A.S.; GORLOV, L.V.;
GUBANOV, Yu.D.; YEFREMOV, A.A.; ZHUKOV, V.F.; IVANOV, V.Ye.;
KOVYRZIN, V.K.; KOPTELOV, Ye.A.; KOSOVSKIY, V.G.; KUKHARKIN,
N.Ye.; KUCHEROV, R.Ya.; LALYKIN, S.P.; MERKIN, V.I.; NECHAYEV,
Yu.A.; POZDNYAKOV, B.S.; PONOMAREV-STEPNOY, N.N.; SAMARIN, Ye.N.;
SEROV, V.Ya.; USOV, V.A.; FEDIN, V.G.; YAKOVLEV, V.V.; YAKUTOVICH,
M.V.; KHODAKOV, V.A.; KOMPANIYETS, G.V.

High-temperature reactor-converter "Romashka." Atom. energ.
17 no.5:329-335 N '64. (MIRA 17:12)

PAVELKA, Karel, MUDr.; KRIEDEL, Frant, MUDr.

Analysis of rheumatic fever morbidity in the Czechoslovakian
Socialist Republic. Cesk.zdravot. 8 no.10:572-579 0'60.

1. Vyzkumny ustav chorob revmatickych, Praha, reditel prof.dr.
Fr. Lench.

(RHEUMATIC FEVER epidemiol)

KRIEDEL, F.; MALEK, P.; BELAN, A.; KOLC, J.

Lymphography of chronic progressive polyarthritis. Rev. Czech. med.
7 no.2:87-99 '61.

1. Research Institute for Rheumatic Diseases, Prague. Director: Prof.
F. Lench, M. D. Institute for Clinical and Experimental Surgery,
Prague. Director: Prof. B. Spacek, M. D.

(LYMPHATIC SYSTEM radiography)
(ARTHRITIS diagn)

KRIEDEL, F.; MALEK, P.; BELAN, A.; KOLC, J.

Chronic progressive polyarthritis in the lymphographic picture.
Cas.lek.cesk 100 no.3:65-72 20 Ja '61.

1. Vyzkumny ustav chorob revmatickych, Praha, reditel prof. MUDr.
Fr. Lenocho; Ustav klinicke a experimentalni chirurgie, Praha-Krc,
reditel prof. MUDr. B. Spacek.

(ARTHRITIS RHEUMATOID radiog)
(LYMPHATIC SYSTEM radiog)

BERG, L.G.; KOVYZINA, A.P.

Article by A.Koisman "Remarks on the differential thermal analysis
of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ [1]" reviewed by L.G.Berg, A.P.Kovyrzina. Zhur. neorg.
khim. 8 no.12:2842 D '63. (MIRA 17:9)

KOVYRZINA, K. A.

USSR/Chemistry - Reaction processes

Card 1/1 Pub. 151 - 23/38

Authors : Pudovik, A. N., and Kovyrzina, K. A.

Title : Reaction of alkyl halides and allyl bromide with dibutylthiosodium phosphide

Periodical : Zhur. ob. khim. 24/2, 307-311, Feb 1954

Abstract : The reaction between alkyl halides and dibutylthiosodium phosphide was investigated. The products obtained from above reaction and their properties are described. Displacement and the addition of the dibutylthio phosphide, according to the double bond of allylthiophosphinic ester, was observed during the reaction of dibutylthiosodium phosphide with allyl bromide. The two low- and high-boiling reaction products obtained and their chemical formulas are described. Five USSR references (1949-1953).

Institution : State University, Kazan

Submitted : September 17, 1953

Kovyazina, K. A.

AUTHORS:

Andreyeshchev, Ye. A., Baroni, Ye. Ye.,
Kovyazina, K. A., Rozman, I. E., Shoniya, V. E.

48-1-14/20

TITLE:

Plastic-Scintillators on a Polystyrene Basis. II. (Plast-massovyye stsintillyatory na osnove polistirola. II.).

PERIODICAL:

Izvestiya AN SSSR Seriya Fizicheskaya, 1958, Vol. 22, Nr 1, pp. 67-69 (USSR).

Received: March 8, 1958

ABSTRACT:

First the method of producing the scintillators is described. The organic luminescence-additions were synthetically produced in the authors' laboratory and carefully purified. Luminescence was excited by β -radiation of $Ce^{144}-Pr^{144}$. The intensity of luminescence was determined according to the mean current of the photomultiplier $\Phi 94-19$. The efficacy of a scintillator with 1,5 g 1,1', 4,4'-tetraphenylbutadiene-1,3 in 100 g polystyrene was assumed as 100. The highest efficacy was found in scintillators with an addition of p-terphenyl ($\sim 3\%$) and 2,5-diphenyloxazole-1,3 ($\sim 1,3\%$). The data given do not make it possible to draw quite unique conclusions as to the radio-luminescence-yield of the scintillators as well as such on the relative quantity of the quantum yield in the fluorescence of the additions. In order to be able to compare the yield

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Plastic-Scintillators on a Polystyrene Basis. II.

48-1-14/20

of radioluminescence, it is necessary to make corrections concerning the spectral sensitivity of the recording device and concerning the reabsorption in the sample itself. It is shown that external the scintillators with p-terphenyl as basic addition and tetraphenylbutadiene and triphenylpyrazoline as spectrum-shifters possess the highest external yield of luminescence. Heterocyclic compounds of Δ^2 -pyranolines show a fairly high quantum yield. Besides the quantum-yield of fluorescence, the efficacy of the transfer of excitation-energy from polystyrene to the luminescence-additions plays an important part in plastic scintillators. There are 1 figure, 2 tables, and 7 references, 5 of which are Slavic.

AVAILABLE:

Library of Congress

1. Chemistry
2. Cyclic compounds
3. Luminescence

Card 2/2

6.3100

S/079/60/030/05/57/074
B005/B125

AUTHORS: Baroni, Ye. Ye., Kovyrzina, K. A.

TITLE: On p,p'-Diphenyl Stilbene ¹

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 5, pp. 1670-1673

TEXT: To increase the efficiency of plastic scintillators in scintillation counters it proved to be expedient to add two luminescing organic compounds together. One of them acts as main activator, while the other is only added in small amounts and is used in the role of co-activator for shifting the fluorescence spectrum and for increasing the total effect of the scintillator. p,p'-Diphenyl stilbene is especially suitable for the co-activator (Refs. 1-5). The authors of the present report worked out a production process for this compound. Diphenyl served as initial product, which was converted into p-diphenyl aldehyde by carbonylation (Refs. 6, 7). This aldehyde yields p,p'-diphenyl benzoin in the benzoin condensation with sodium cyanide in an alcohol solution. For steric reasons these compounds cannot be reduced with the aid of the usual reduction process for the production of stilbene from benzoin (Refs. 9-11). The authors trace out

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On p,p'-Diphenyl Stilbene

S/079/60/030/05/57/074
B005/B125

a new method for the reduction of diphenyl benzoin in a hydrogen atmosphere with the aid of zinc dust and concentrated hydrochloric acid. With the use of usual zinc dust cis diphenyl stilbene forms in the form of white crystals. When, however, the reduction is carried out with amalgamated zinc dust trans diphenyl stilbene results in the form of greenish-yellow shiny flakes. These two geometric isomers differ in their fluorescences (Refs. 13-18). The absorption band of the cis form is found in shorter wave lengths; also its absorption maximum has a lower value than that of the trans form. Fig. 2 shows the absorption spectra of the two geometric isomers of the diphenyl stilbene in dioxane. Characteristic differences also appear in the fluorescences of the two isomeric forms in the crystalline state; the trans form fluoresces intensively blue, while the cis form shows an essentially weaker fluorescence, violet in color. In organic solvents both forms fluoresce violet; the intensity of the radiation is, however, here also greater in the case of the trans form. The trans form is more effective than the cis form in its characteristic as co-activator for scintillators. The results of the measurements with respect to this will be published separately. In heating in nitrobenzene the trans form of the diphenyl stilbene changes into the cis form. The same effect occurs

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On p,p'-Diphenyl Stilbene

S/079/60/030/05/57/074
B005/B125

also in the longer action of ultraviolet rays on crystals of the trans form. The synthesis of the two isomeric forms of the diphenyl stilbene is thoroughly described in the experimental section. There are 2 figures and 24 references, 3 of which are Soviet.

SUBMITTED: May 27, 1959

Card 3/3

BARONI, Ye.Ye.; KOVYZINA, K.A.; ANDREYESHCHEV, Ye.A.

Synthesis of some Δ^2 -pyrazoline derivatives. Zhur.ob.khim.
30 no.6:2002-2008 Je '60. (MIRA 13:6)
(Pyrazoline)

21,5200

AUTHORS:

Baroni, Ye. Ye., Kovyryzina, K. A.,
 Rozman, I. M., Andreyeshchev, Ye. Ye.,
 Shoniya, V. M. (Sukhuml)

69139

S/076/60/034/03/027/038

B005/B016

TITLE:

Plastic Scintillators on a Polystyrene Basis. III.

PERIODICAL:

Zhurnal fizicheskoy khimii, 1960, Vol 34, Nr 3, pp 665-667 (USSR)

TEXT: The authors synthesized polystyrene scintillators with additions of various derivatives of pyrazoline, oxazole, and stilbene according to a standard method (cf Ref 2). The synthesis of some of these additions which have not yet been described in publications, and the influence exercised by the cis-trans-configuration of 1,3,4,5-tetraphenyl pyrazoline and p,p'-diphenyl stilbene upon the intensity of luminescence of the scintillators will be dealt with in a separate paper. The intensity of luminescence of standard samples of the scintillators synthesized (16 mm diameter, 10 mm height) on excitation by β -radiation of a $Ce^{144} - Pr^{144}$ preparation was measured photoelectrically on an FEU-29 photomultiplier. No corrections were considered for the spectrum of luminescence radiation, for self-absorption etc. Thus, the results obtained characterize directly the efficiency of scintillators combined with a photomultiplier. Table 1 presents the results obtained for the following luminescent additions: 22 derivatives of Δ^2 -pyrazoline, 3 derivatives of 1,3-oxazole, 1 derivative of oxazolone, and 2 derivatives of stilbene. The efficiency of stilbenes mixed with p-terphenyl

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Plastic Scintillators on a Polystyrene Basis. III

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S/076/60/034/03/027/038
B005/B016

was also studied. For each of the additions investigated the table gives the concentration the addition of which causes maximum luminescence of the scintillator, furthermore, the relative efficiency on direct excitation of the addition by ultraviolet radiation, and finally the wavelength on which the maximum of the emission spectrum is found. All these values are given without corrections. The efficiency of an addition is directly proportional to the quantum yield in fluorescence and depends on the agreement between the luminescence spectrum and the spectral sensitivity of the photomultiplier. The efficiency of the scintillator further depends on the extent of excitation energy transfer from the polystyrene to the addition. Among the additions listed in table 1 there are some causing a very high scintillator efficiency, which may therefore be recommended for the manufacture of scintillators. The authors also investigated the applicability of some of the above-mentioned additions to the shifting of the spectrum in polystyrene scintillators. Table 2 shows the relative efficiency of 4 derivatives of 2-pyrazoline and of 2 derivatives of stilbene with respect to the shifting of the spectrum in polystyrene scintillators. The measurements were also carried out by means of an FEU-29 photomultiplier. The concentration of the additions in these experiments was 0.001 g/g. There are 2 tables and 3 Soviet references.

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Plastic Scintillators on a Polystyrene Basis. III

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S/076/60/034/03/027/038
B005/B016

SUBMITTED: May 28, 1959

Card 3/3

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27700
S/120/61/000/003/010/041
E073/E335

AUTHORS: Baroni, Ye.Ye., Kilin, S.F., Kovyrzina, K.A.,
Rozman, I.M. and Shoniya, V.M.

TITLE: On the Duration of the Light-emission of Plastic
Scintillators

PERIODICAL: Pribery i tekhnika eksperimenta, 1961, No. 3,
pp. 72 - 74

TEXT: The results are described of measurements of the
light-emission time of the relative yield of luminescence for
a number of plastic scintillators based on polystyrene and
polyvinyltoluol. The measurements were made by means of an
 Λ -ray phase fluorimeter. The data permit estimating the
"suitability" of plastic scintillators in "high-speed circuits".
The measured "fluorimetric times" are tabulated for plastic
scintillators with a single luminescent addition. It was
found that the times were particularly low for scintillators
made of di- and triphenyloxazole, diphenyloxodiazole and
n-terphenyl. Of the investigated scintillators the largest H/τ
value was obtained for scintillators with n-terphenyl, the
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X

On the Duration of

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E073/E335

optimum concentration being 4 g per 100 g of monomer. The dependence of H/τ on the polymerisation conditions of polyvinyltoluol showed an unexplained decrease in τ in the case of polymerisation at 200 °C. The fluorimetric time for polyvinyltoluol equals 13.5 nanosecs for a polymerisation time of 120 hours at 170 °C and 11.5 nanosec for 30 hours polymerisation at 200 °C. Spectrum mixing agents bring about an increase in H owing to a decrease of the self-absorption in the basic addition and lead to a better correspondence of the emission spectra with the spectral sensitivity of the photo-electron multipliers. However, the value of τ also increases simultaneously. The rôle of the spectrum-mixing agents 4P, PPS and StS consists basically of the transformation of the short-wave part of the illumination spectrum 3P into a proper emission spectrum. Thereby, the influence of reabsorption in the 3P itself on the external magnitude of the scintillation and on the duration of the light emission is excluded. The obtained data show that as regards the speed of the response (H/τ) some plastics are superior to stilbene. Table 4 shows

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On the Duration of

²⁷⁷⁰⁰
S/120/61/000/003/010/041
E073/E335

the comparative values; all the plastic scintillators had a diameter of 28 mm,^a/height of 25 mm with a MgO reflector and H_γ was measured by means of a photomultiplier $\Phi\gamma$ -27 (FEU-29). There are 4 tables and 8 references: 5 Soviet and 3 non-Soviet. The two English-language references quoted are: Ref. 1 - R.K. Swank, W.L. Buck - Rev. Scient. Instrum., 1955, 26, 15; Ref. 2 - R.C. Sangster, J.W. Irvine - J. Chem. Phys., 1956, 24, 670.

SUBMITTED: June 21, 1960

X

Card 3/4

KILIN, S.F.; KOVYRZINA, K.A.; ROZMAN, I.M.

Luminescence of n-terphenyl in a mixture of toluene and
carbon tetrachloride. Opt. i spektr. 11 no.3:390-396 S '61.
(MIRA 14:9)

(Terphenyl) (Luminescence)

S/079/61/031/002/016/019
B118/B208

AUTHORS: Baroni, Ye. Ye. and Kovyrzina, K. A.

TITLE: Formylation reaction of Δ^2 -pyrazoline derivatives

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 2, 1961, 627-628

TEXT: There is only a limited number of methods of introducing the aldehyde group into heterocyclic compounds. Gattermann's reaction (Ref. 1) was used to some extent, but gives only poor yields and meets with certain experimental difficulties. A direct formylation in the heterocyclic series was first performed by W. I. King and F. F. Nord (Ref. 2) who used methyl formanilide and phosphorus oxychloride as formylating agents. In Ref. 3, A. W. Weston used ethyl formanilide for this purpose. In 1948, dimethyl formamide has been patented as effective agent for the formylation of aromatic tertiary amines (Ref. 4). F. T. Tyson and I. T. Shaw (Ref. 5) used dimethyl formamide, and obtained 3-indolyl aldehyde in a 72% yield. This formylating agent differs from methyl formanilide by its comparatively low costs and high efficiency. In recent years, the aldehyde group could be converted to thiophene (Ref. 6), to some pyrazole (Ref. 7), furan (Ref. 8), and pyrrol deriva-

Card 1/2

Formylation reaction ...

S/079/61/031/002/016/019
B118/B208

tives (Ref. 9) by dimethyl formamide. The authors formylated 1.5-diphenyl- Δ^2 -pyrazoline with dimethyl formamide. The introduction of the aldehyde group into Δ^2 -pyrazolines offers new possibilities of synthesizing luminescent heterocyclic compounds. Direct formylation of Δ^2 -pyrazolines with dimethyl formamide is of practical interest owing to simple reaction and good yield. Formylation is best carried out with a sixfold excess of dimethyl formamide at a temperature of between 95 and 100°C. Higher temperature (125-130°C), and reduction of the amide quantity results in lower yields and gives resinous products; even causes carbonization. There are 8 references: 2 Soviet-bloc and 6 non-Soviet-bloc.

SUBMITTED: February 29, 1960

Card 2/2

BARONI, Ye.Ye. & KOVYRZINA, K.A.

Synthesis of luminescent heterocyclic compounds. Zhur.ob.khim. 31
no.5:1641-1643 My '61. (MIRA 14:5)
(Heterocyclic compounds) (Luminescent substances)

S/063/62/007/005/005/006
A057/A126

AUTHORS: Kovyrzina, K.A., Radaykina, L.A., Baroni, Ye.Ye.

TITLE: Synthesis of 5-stilbenyl-1,3-diphenyl- Δ^2 -pirazoline

PERIODICAL: Zhurnal vsesoyuznogo khimicheskogo obshchestva imeni D.I. Mendeleeva,
v. 7, no. 5, 1962, 592 - 593

TEXT: A method for the synthesis of 5-stilbenyl-1,3-diphenyl- Δ^2 -pirazoline (II) from n-3-[1-phenylpropenone-(1)]-stilbene (I) is described. The investigation was carried out in order to synthesize a new luminescent heterocyclic compound with high efficiency as an admixture to plastic scintillators, having a pronounced fluorescence in the range of about 4,500 Å. Compound (I) is prepared by condensation of stilbenaldehyde with acetophenone: 1.6 g stilbenaldehyde is dissolved in 110 ml alcohol, 1.8 g acetophenone and 1 ml 10% NaOH added, the turbid solution left to stand at room temperature for two days, and afterwards the precipitated (I) is filtered off, washed, dried, and recrystallized with acetone. The final product (II) is prepared by dissolving 4.2 g (I) in 700 ml of an alcohol/benzene mixture (6:1), subsequent addition of 2.1 ml freshly distilled phenylhydrazine, 2.1 ml conc. HCl and the condensation is carried out at 90 - 95°C during 28 h

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Synthesis of 5-stilbenyl-1,3-diphenyl...

S/063/62/007/005/005/006

A057/A126

under stirring. After washing of the precipitate and recrystallization, (II) is obtained with a 96% yield, showing an absorption spectrum in dioxane ($C = 10^{-3}$ mole/l) with λ_{\max} 3,100 Å; $\epsilon = 63,400$; λ_{\max} 3,600 Å; $\epsilon = 20,992$.

ASSOCIATION: Fiziko-tekhnicheskii institut AN GruzSSR (Physico-Technical Institute AS GruzSSR)

SUBMITTED: January 25, 1962

Card 2/2

S/051/62/012/002/010/020
E202/E192

AUTHORS: Kovyrgina, K.A., and Rozman, I.M.

TITLE: Luminescence of certain solvents

PERIODICAL: Optika i spektroskopiya, v.12, no.2, 1962, 248-253

TEXT: The intensity of luminescence was measured during the exposure to soft ionising radiations which do not produce Cherenkov light, in a series of pure solvents and in solutions of up to 4% w/w, carefully purified 2,4,5-triphenyl-1,3-oxazol (3RO). The following solvents were used: n-terphenyl, toluene, n-xylene, benzene, acetone, tertiary amyl acetate, 1,4-dioxan, n-heptane, carbon tetrachloride, methylaldehyde, ethanol and water. Excitation was by a variety of sources, viz:

α -Po²¹⁰, β -C¹⁴, β -Pm¹⁴⁷, 25 kV X-ray, and 2652 Å UV. The intensity of luminescence obtained with each source and each solvent was compared. The apparatus was of the customary cell type with diaphanous windows for the irradiation and a photomultiplier tube. The experimentation included the following measurements: absorption spectra of some of the pure solvents;
Card 1/2

KOVYRZINA, K.A.; ROZMAN, I.M.

Luminescence of some solvents. Opt. i spektr. 12 no.2:248-253
F '62. (MIRA 15:2)

(Solvents)
(Luminescence)

KOVYRZINA, K. A.; RADAYKINA, L. A.; BARONI, Ye. Ye.

Synthesis of 5-stilbenyl-1,3-diphenyl- α^2 -pyrazoline. Zhur.
VKHO 7 no.5:592-593 '62. (MIRA 15:10)

1. Fiziko-tekhnicheskiy institut AN Gruzinskoy SSR.

(Pyrazolino) (Stilbene) (Luminescent substances)

L 18742-63 EWT(m)/BDS ASD
ACCESSION NR: AT3002206

9/2941/63/001/000/0128/0131 35

AUTHORS: Andreyeshchev, Ye. A.; Baroni, Ye. Ye.; Viktorova, V. S.; Kovy*rzina, K. A.; Rozman, I. M.; Shoniya, V. M.

TITLE: Excitation energy transfer in solid solutions of organic substances. 2

SCURCE: Optika i spektroskopiya; sbornik statey, v. 1: Lyuminestsentsiya. Moscow, Izd-vo AN SSSR, 1963, 128-131

TOPIC TAGS: phosphorescence, donor, acceptor, induction resonance

ABSTRACT: Phosphorescent quenching of the donor energy and the excitation energy transfer from donor to acceptor were studied in several organic substances. The solvents and solutes are listed. The experimentally determined radiationless transfer parameter p_t (defining optical characteristic of the donor and acceptor molecules and the dielectric property of the media) was found to be consistently higher (about 1.8 times) than the value determined analytically by the induction resonance theory. Orig. art. has: 3 figures, 3 tables, and 3 formulas.

ASSOCIATION: none

Card 1/1/

BARONI, Ye.Ye.; KOVYRZINA, K.A.

Synthesis of diphenyl- and terephenyldipyrzolinyls. Zhur.ob.
khim. 33 no.2:583-586 F '63. (MIRA 16:2)

1. Fiziko-tekhnicheskoy institut AN Gruzinskoy SSR.
(Pyrzoline)

BARONI, Ye.Ye.; KOVYZINA, K.A.

Synthesis of di- Δ^2 -pyrazolines. Zhur.ob.khim. 33
no.3:959-963 Mr '63. (MIRA 16:3)
(Pyrazoline)

ANDREYESHCHEV, Ye.A.; BARONI, Ye.Ye.; VIKTOROVA, V.S.; KOVYZINA,
K.A.; ROZMAN, I.M.; SHONIYA, V.M.

Chemical transformation during polymerization investigated
by means of absorption spectra. Vysokom. soed. 5 no.10:1482-
1484 0 '63. (MIRA 17:1)